2642/3642 Series

Thermal Printers

User's Manual

Models: LP2642 and TLP2642
LP3642 and TLP3642

Eltron

User's Manual No. 980101-001 Rev. A

FOREWORD

This manual provides installation and operation information for the LP2642, TLP2642, LP3642 and TLP3642 series printers, manufactured by Eltron International Incorporated, Simi Valley, California.

RETURN MATERIALS AUTHORIZATION

Before returning any equipment to Eltron for in warranty or out of warranty repair, contact Repair Administration for a Return Materials Authorization (RMA) number. Repack the equipment in the original packing material and mark the RMA number clearly on the outside. Ship the equipment, freight prepaid, to the address listed below:

Eltron Repair Administration, USA
41 Moreland Road
Simi Valley, CA. 93065
Phone: +1 (805) 579-1800
FAX: +1 (805) 579-1808

Label Printers:
Eltron International, Northern Europe
Unit 2, Rose Kiln Lane
Reading, Berkshire, RG2 OHP England
Phone: +44 (0) 118 975 2024
FAX: +44 (0) 118 975 2005

Card Printers:
Eltron International, Southern Europe
Zone Indutrielle, Rue d'Amsterdam
44370 Varades, France
Phone: +33 (0) 240 097 070
FAX: +33 (0) 240 834 745

COPYRIGHT NOTICE

This document contains information proprietary to Eltron International Incorporated. This document and the information contained within is copyrighted by Eltron International Incorporated and may not be duplicated in full or in part by any person without written approval from Eltron. While every effort has been made to keep the information contained within current and accurate as of the date of publication, no guarantee is given or implied that the document is error-free or that it is accurate with regard to any specification. Eltron reserves the right to make changes, for the purpose of product improvement, at any time.

TRADEMARKS

LP2642, TLP2642, LP3642 and TLP3642 are service marks and Eltron is a trademark of Eltron International Incorporated. Windows and MS-DOS are registered trademarks of Microsoft Corp. All other marks are trademarks or registered trademarks of their respective holders.

We Need To Hear From You!

To Establish Your Warranty Period And Provide Access To Technical Support, Send Us Your Product Registration Card Today!

Eltron warrants the mechanism, control electronics and power supply, under normal use and service, to be free from defects in material and workmanship for a period of twelve (12) months from the date of purchase by the end user. Eltron warrants the print head, under normal use and service, to be free from defects in material and workmanship for a period of ninety (90) days or 30KM of printing (whichever occurs first) from the date of purchase by the end user. Proof of purchase or product registration is required. If proof of purchase or product registration cannot be established, shipment date to the original buyer (dealer or distributor) will be used to establish the warranty period.

Failure to exercise caution to protect the equipment from electrostatic discharge damage, adverse temperature and humidity conditions or physical abuse may void the warranty. Failure to use only Eltron approved media may void the warranty. Eltron will, at it's option, repair or replace the equipment or any parts which are determined to be defective within this warranty period, and which are returned to Eltron F.O.B. factory of origin.

The warranty set forth above is exclusive and no other warranty, whether written or oral, is expressed or implied. Eltron specifically disclaims the implied warranties of merchantability and fitness for a particular purpose.

FCC NOTICE:

This equipment has been tested and found to comply with the limits of a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

INDUSTRY CANADA NOTICE:

This device complies with Industry Canada ICS-003 class B requirements.

Cet equipement est conforme a l'ICS-003 classe B de la norm Industrielle Canadian

The printer and power supply should never be operated in a location where either one can get wet. Personal injury could result.

Always use high quality Eltron approved labels, tags and transfer ribbons. If adhesive backed labels are used that DO NOT lay flat on the backing liner, the exposed edges may stick to the label guides and rollers inside the printer, causing the label to peel off from the liner and jam the printer. Eltron approved supplies can be ordered from your ELTRON dealer. For the name of a dealer in your area, call 1(800) 344-4003.

If you should run out of labels or ribbon while printing, DO NOT turn the power switch OFF (0) while reloading or data loss may result. The printer will automatically resume printing when a new label roll is loaded.

There is danger of explosion if the battery is incorrectly replaced. Replace batteries with the types listed here only. Discard used batteries according to the instructions supplied by the battery manufacturer. Do Not dispose of the battery in fire. The battery may explode causing damage or injury.

TABLE OF CONTENTS

Installation

Installation 3

Operation

Power Switch 11
The FEED Control 12
The POWER Indicator 13
Loading Labels or Tags 14
Top Of Form Sensing 18
AutoSense Gap Sensor Adjustment 19
Threading The Optional Label Dispenser 20
Cleaning The Print Head 21
Loading Transfer Ribbons 22
Removing A Partially Used Transfer Ribbon 28
Replacing the Printer Memory Backup Battery 29

Appendix A

Troubleshooting 31

Appendix B

Accessories 33

Appendix C

Using The Windows Printer Driver 35

1
Installation

This section provides information on the installation of the printer and software.

The LP2642 and LP3642 are low cost, desktop direct thermal printers. The TLP2642 and TLP3642 are low cost, desktop thermal transfer and direct thermal printers. This family of printers is specifically designed for printing labels, tags or continuous receipts (with or without bar codes) from any DOS™, Windows™ or ASCII based compatible computer.

Unpacking Your Printer

Printer

Power Supply

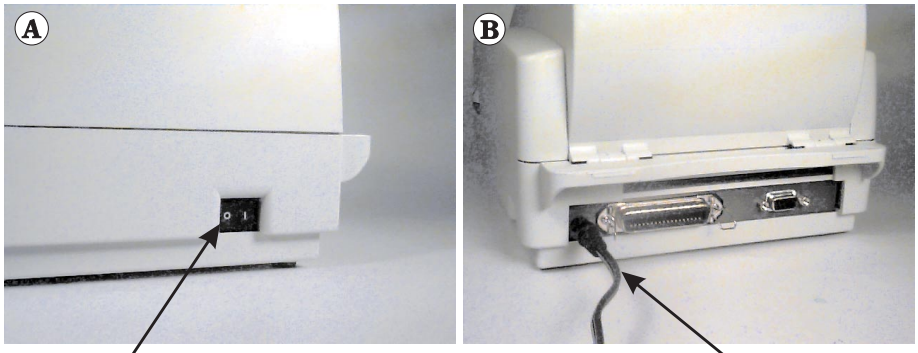
User's Manual, Sample Roll, Spool and Cleaning Pen.

Software

Installation

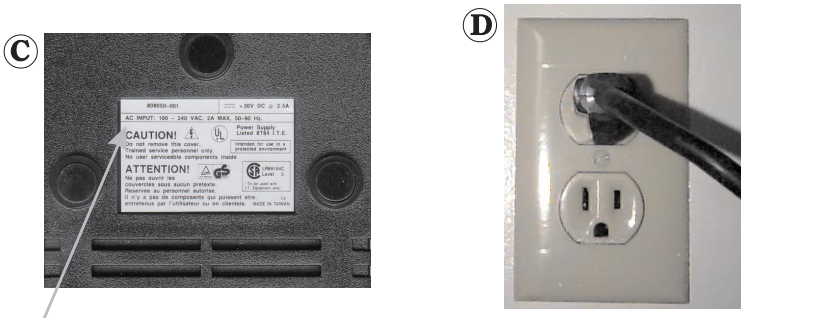
The following steps will guide you through the installation of the printer and software.

Step ❶ - Attach Power Supply



OFF (0)

Power



Check Voltage

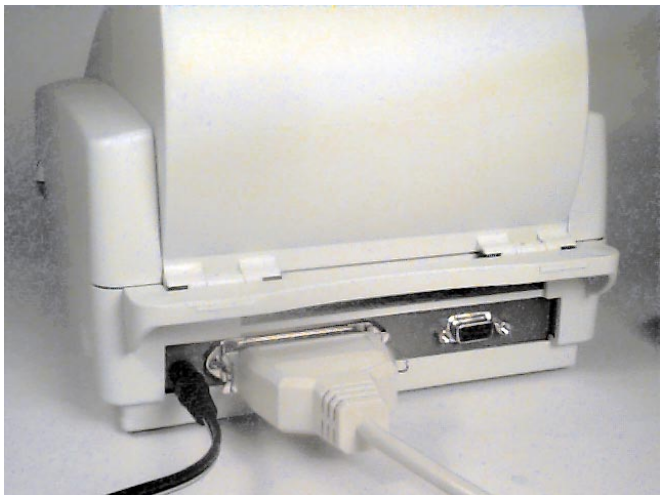
Connect To Suitable Supply

WARNING

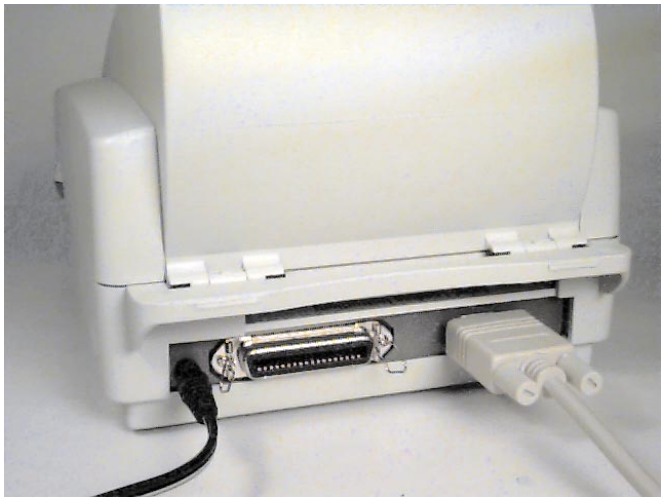
See Warning on Page v.

Step ❷ Attach Interface Cable

Parallel Interface



Serial Interface



For additional information on serial cable wiring, refer to Appendix A.

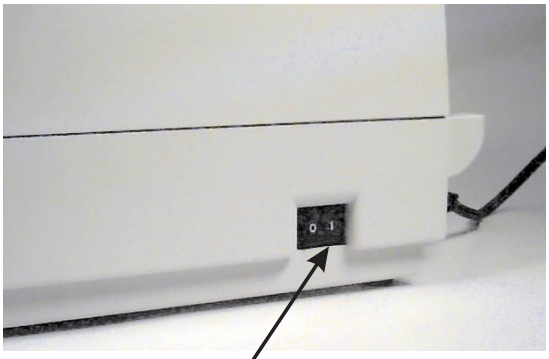
Step ❸ Memory Cartridge (Optional on 2642)

Remove Cover

Install Cartridge

Press To Seat

Step ❹ Apply Power

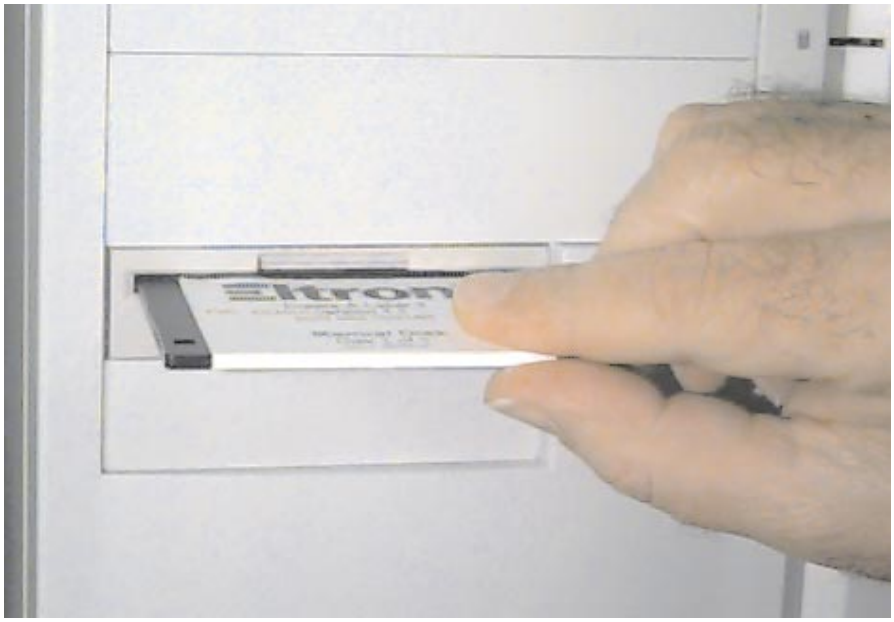


ON (1)

ON

If the indicator fails to light, refer to Appendix A - Trouble Shooting.

Step ❹ Install Software



Start your computer. Follow the installation instructions on the diskette label to install the software.

Refer to Section 2 - Operation, for information on loading labels and using your printer.

2
Operation

This section provides information on the operation of the LP2642, TLP2642, LP3642 and TLP3642 printers.

Using Your Printer

A. Roll Holder

B. Feed Switch

C. Power Indicator

D. Print Head

E. Label Guide Adjust

F. Cover Release

G. Carriage Release

H. Gap Sensor

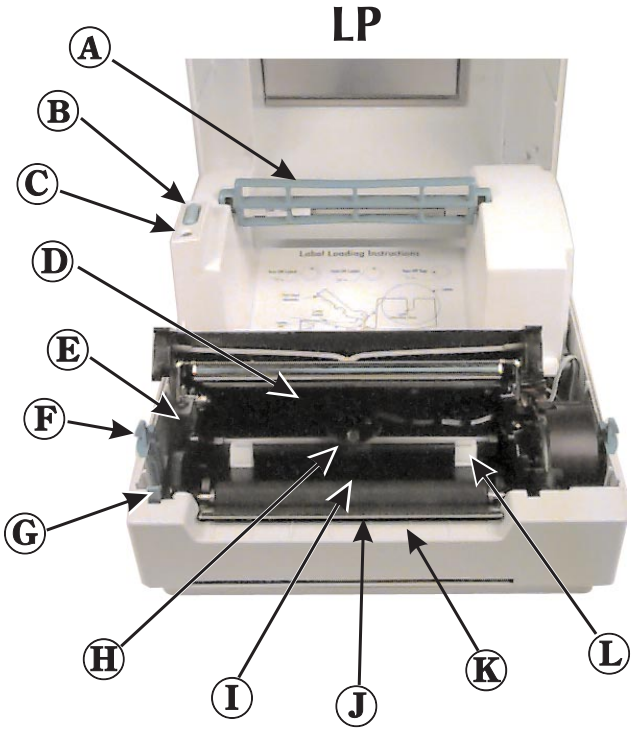
I. Black Line Sensor (optional)

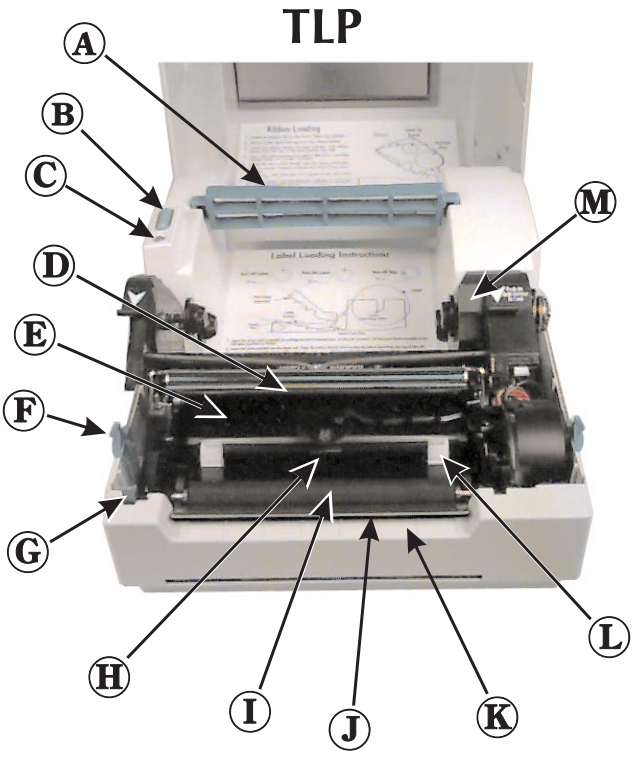
J. Dispenser Bar (optional)

K. Dispenser Feed Slot

L. Label Guides

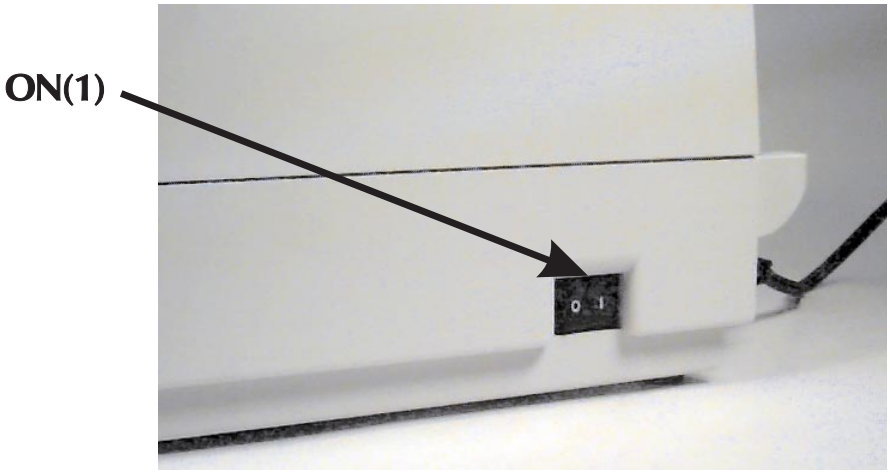
M. Ribbon Drive (TLP only)





Power Switch

The printer's power switch is located on the right side of the printer near the back. Placing this switch in the ON (1) position will apply power to the printer.



The FEED Control

The FEED Control can be used in two ways, ***tapping*** or ***holding***. When power is first applied with labels loaded, ***tapping*** the FEED Control will cause the paper to advance to the top of the next label. This action is referred to as a Form Feed.

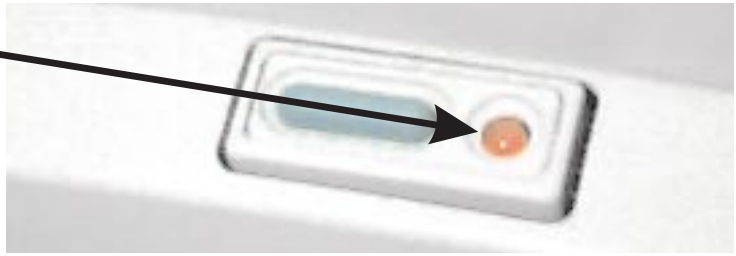
FEED Switch

When power is first applied without labels loaded, ***holding*** the FEED Control will cause the printer to continuously Line Feed until the control is released. This mode is useful when loading labels in the printer. After the labels have been threaded through the printer, ***tapping*** the FEED Control 3 more times (for a total of 4 taps) will cause a Form Feed.

The POWER Indicator

When the printer power is first switched ON (1) with labels loaded, the POWER indicator will glow GREEN, indicating that the printer is ready for operation. If labels are not loaded, the indicator will glow RED, indicating an out of labels or ribbon condition.

POWER Indicator



Indicator Color	Meaning
GREEN	Power ON, labels loaded, ready for use.
RED	Power ON, out of labels or ribbon.
ORANGE	Error condition, refer to Appendix A.
DARK	Power OFF.

If the POWER indicator should fail to light or glows RED even when labels are loaded, refer to Appendix A.

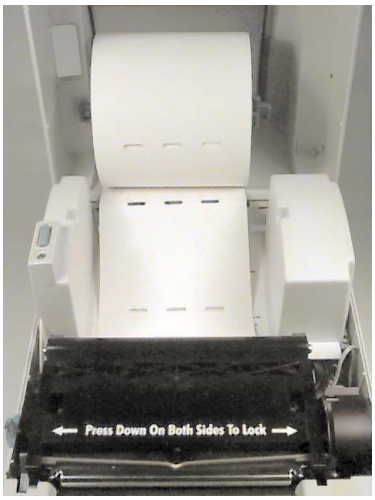
Loading Labels or Tags

Your printer can print on adhesive backed labels, non-adhesive tags or continuous non-adhesive paper. Loading either labels or tags is easy, however the feed direction of each roll is different.

Step ❶ Open the printer top cover and place the spindle inside the roll of labels or tags.

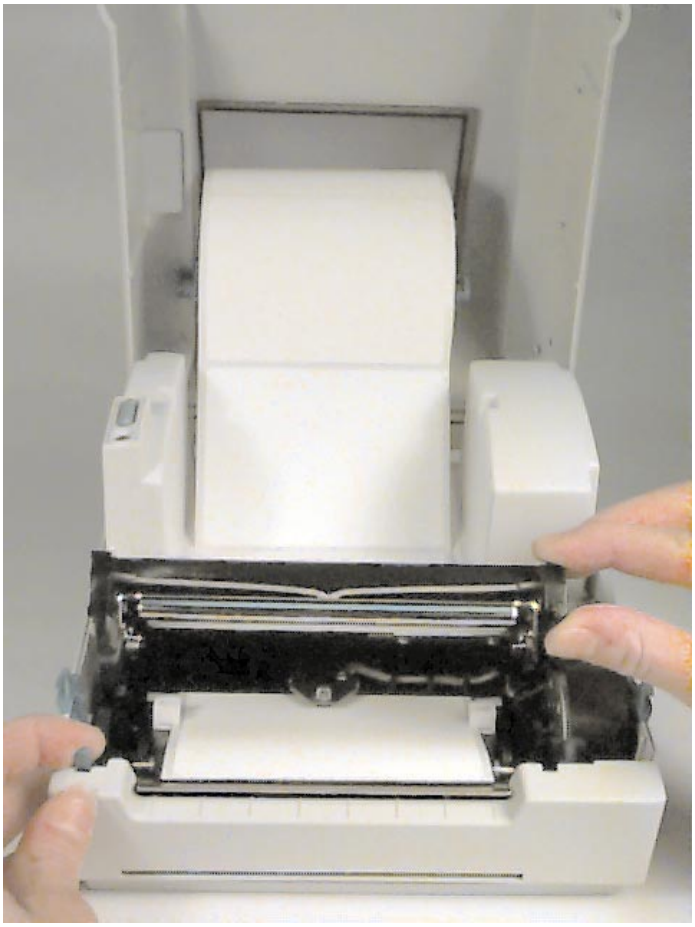
Labels

Tags

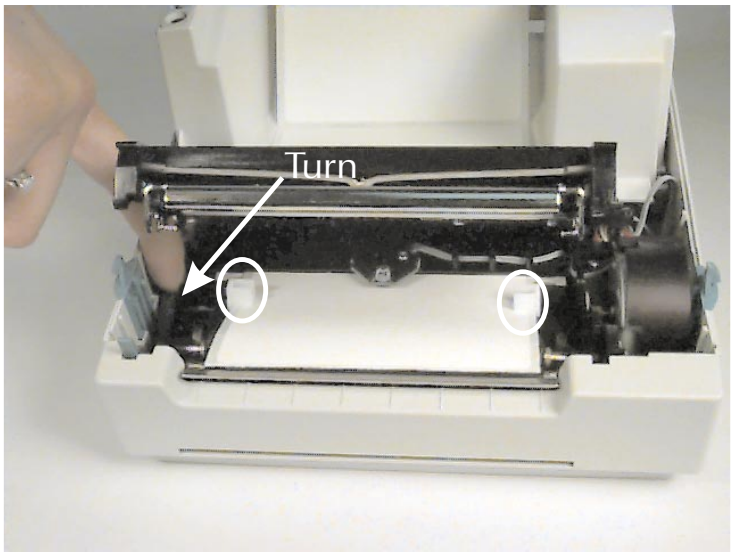


See Caution on Page v.

Step ❷ Open the Print Carriage. Insert the end of the roll into the feed slot and through the Label Guides.



Step ❸ Turn the green wheel to adjust the Label Guides to match the width of the roll.



Step ❹ Close and lock the Print Carriage. Tap the FEED Control until the POWER indicator glows GREEN.

Perform the AutoSense gap sensor adjustment.

HINT

Windows Users! Use *Settings* / *Printers* on the Windows 95 Start Menu to select the label size that matches the labels loaded in the printer.

Top Of Form Sensing

To accommodate different size media, your printer is equipped with a sensor capable of detecting the top of each label or tag. Two methods are used by the printer for top of form sensing: Gap Sensing and Black Line Sensing.

The gap sensing feature depends on the ability of the Gap Sensor to "see through" the label liner between labels. Gap sensing is standard on all printers.

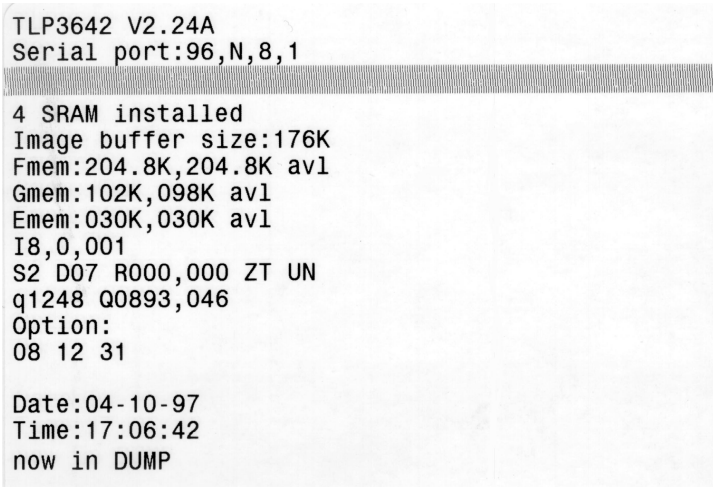
An optional Black Line Sensor may also be installed in your printer. The Black Line Sensor is used with special labels that have a black line printed on the back of the label liner between each label.

For proper operation, the printer needs to measure the length of the labels. Also, due to manufacturing differences in label stock, the Gap Sensor may have difficulty distinguishing the difference between labels and the liner. When this occurs, the printer Power Indicator will switch from GREEN to ORANGE or RED. If this condition occurs, **the AutoSense feature should be activated** to adjust the sensitivity of the sensor and measure the label length.

AutoSense Gap Sensor Adjustment

To activate the AutoSense feature, first place the power switch in the OFF (0) position. Load labels into the printer (do not use the dispenser), then ***press and hold the FEED Control while placing the power switch in the ON (1) position***. Release the FEED Control when the printer starts feeding labels. The printer will advance 3-4 labels while performing the adjustment. When the adjustment is complete, a status summary label will be printed and the printer will be placed in **Diagnostic Dump mode**. Tap the FEED Control once to switch the printer back to normal operation. If the indicator continues to glow ORANGE or switches to RED, refer to Appendix A for troubleshooting information.

Dump Mode Sample Printout



Threading The Optional Label Dispenser

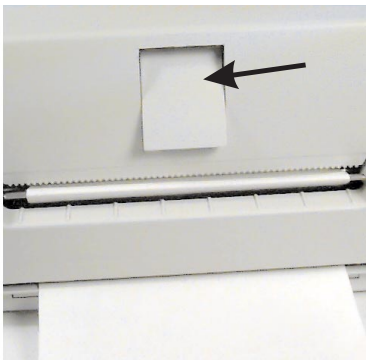
If your printer is equipped with the optional Label Dispenser (PSAT or PSET) and you would like the printer to automatically peel adhesive labels from the backing, follow the steps below:

Step ❶ Perform steps 1-4 of the Loading Labels procedure.

Step ❷ Peel the first two labels off the backing.

Step ❸ While pressing the FEED switch, push the label backing into the peeler slot.

Step ❹ Open the print carriage and pull the label backing out the bottom slot until it is tight across the peeler bar. Close and lock the print carriage.



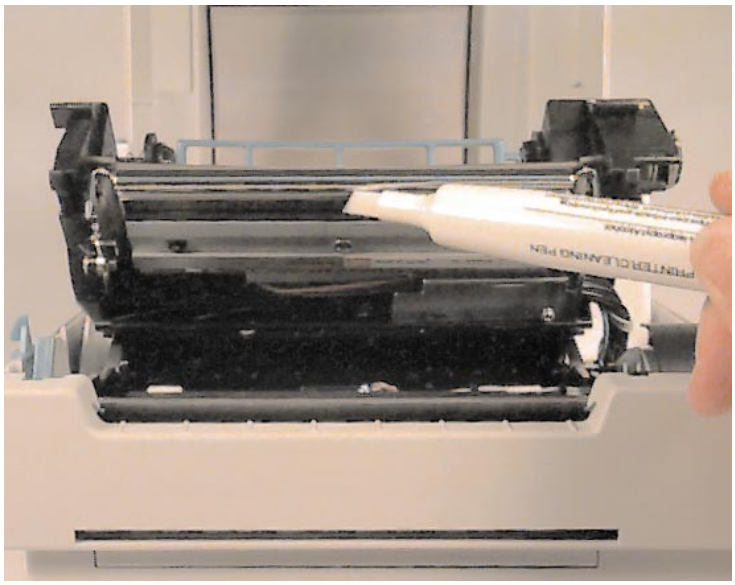
Activate the Label Taken Sensor by pressing in on the top of the sensor.

Cleaning The Print Head

As you use your printer, the print head may become dirty resulting in poor print quality. Whenever new labels or transfer ribbon are loaded into the printer, the print head should be cleaned with a Cleaning Pen (p/n 800105-001).

Step ❶ Remove the transfer ribbon.

Step ❷ Gently rub the Cleaning Pen across the dark area of the print head.

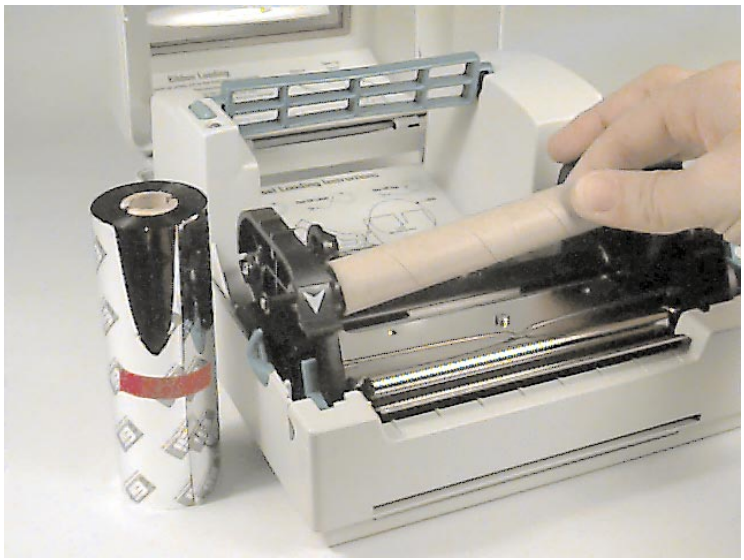


Allow the print head to dry for 1 minute before loading a transfer ribbon or labels.

Loading Transfer Ribbons
(TLP Models Only)

Transfer ribbons are used when printing on thermal transfer adhesive labels or non-adhesive tags. Thermal transfer ribbons are available in general purpose wax, general purpose resin and polyester resin.

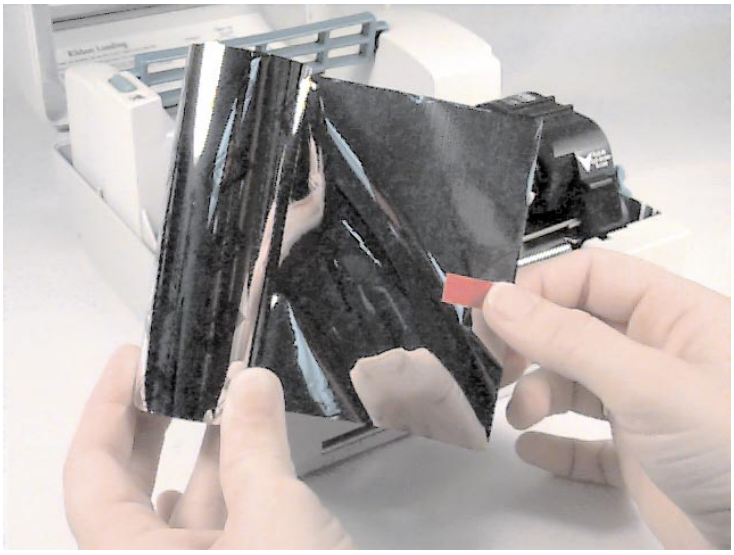
Step ❶ Install an empty roll onto the front (take-up ribbon spool.



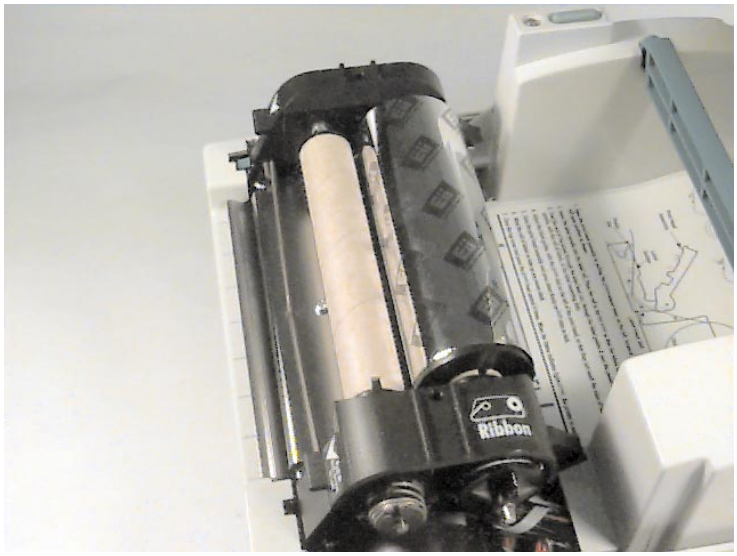
CAUTION

See Caution on Page v.

Step ❷ Loosen the tape that secures the leader on the new transfer ribbon. Fold it over the end of the leader and press in place. The tape will be used to attach the leader to the take-up roll.



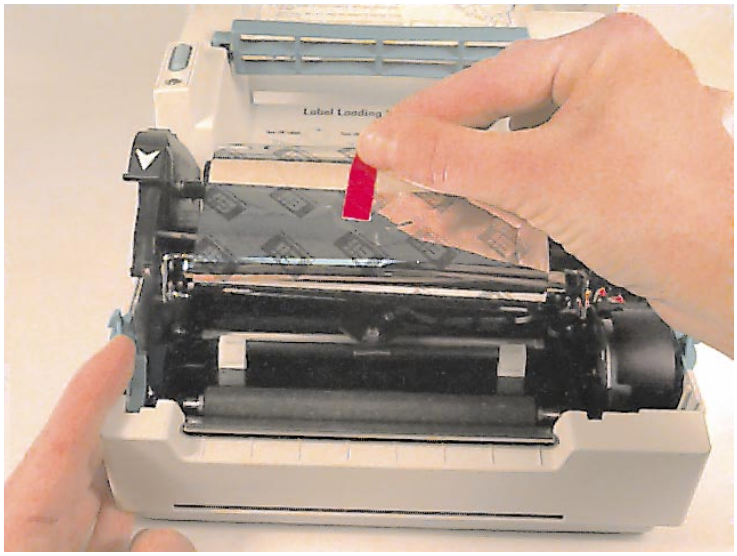
Step ❸ Install the ribbon on the rear (supply) spindle so that the ribbon feeds from the top of the roll into the ribbon feed slot.



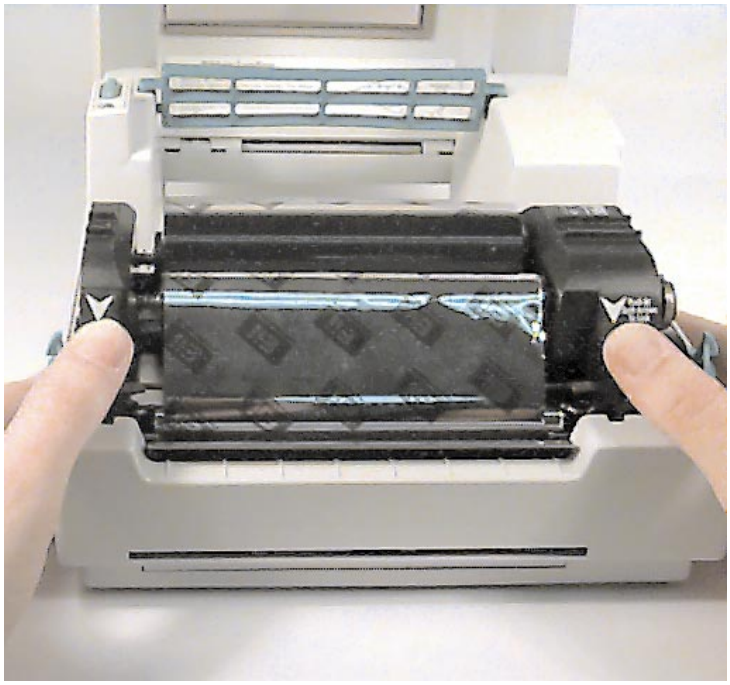
NOTE

The ribbon does not follow the same path as the labels.

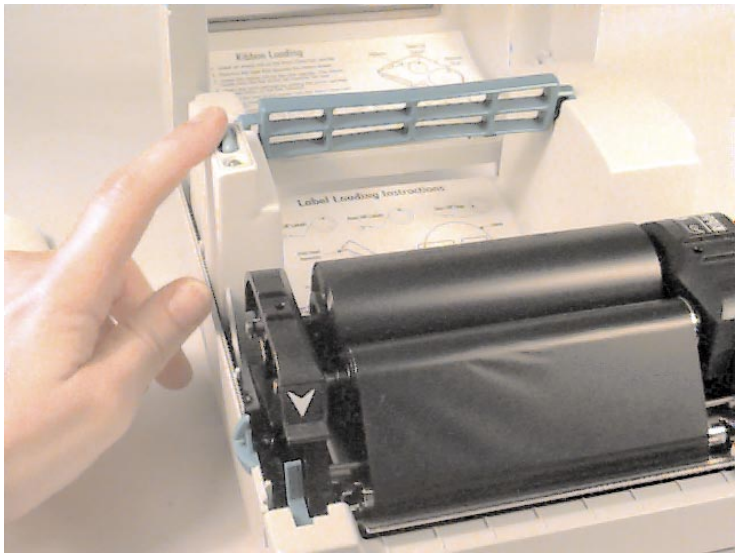
Step ❹ Open the print carriage and pull the ribbon leader forward towards the front of the print carriage and attach to the take-up roll with adhesive tape.



Step ❺ Close the print carriage and press down firmly at both arrows to lock.



Step ❻ Tap the feed control until the ribbon advances to the black area.



Removing A Partially Used Transfer Ribbon

A partially used transfer ribbon can be removed by following the steps below. Partially used transfer ribbons can be reloaded using the normal ribbon loading procedure.

Step ❶ Open the print carriage. Using scissors, cut the transfer ribbon just below the take-up roll.

Step ❷ Remove the roll and tape the end to prevent it from unwrapping.

Step ❸ Remove the take-up roll and remove the used ribbon by unwinding into a trash can.

Replacing the Printer Memory Backup Battery

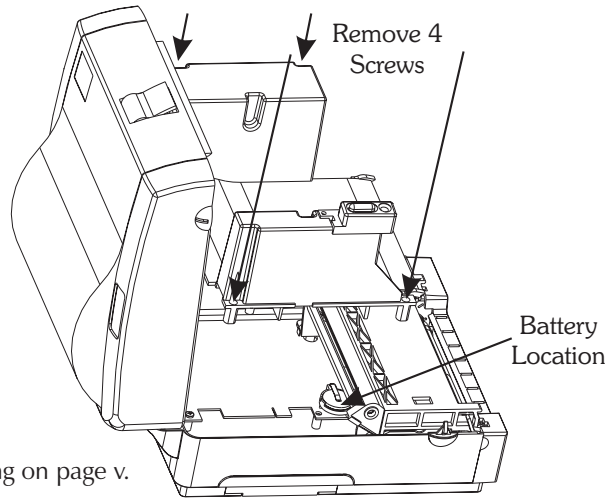
The printer contains memory for storage of operating parameters, forms, graphics and soft fonts. A battery prevents memory loss if the printer power is switched off or disconnected. When the battery is exhausted, the printer will print “LOST INTERNAL INFO”. If this happens, turn off the printer power and follow the steps below to replace the battery.

CAUTION

ALL INFORMATION IN THE PRINTERS MEMORY WILL BE LOST IF THE BATTERY IS REMOVED.

Step ❶ With the printer power off, open the cover and remove any labels that may be loaded.

Step ❷ Remove the four (4) screws that secure the label cradle and lift off.



WARNING
See Warning on page v.

Step ❸ Remove and dispose of the battery according to the manufacturer’s instructions.

Step ❹ Install a fresh battery, replace the label cradle and load labels. Switch the power on. If a “LOST INTERNAL INFO" label prints, switch the power off and back on.

Appendix A - Troubleshooting

Problem	Solution or Reason
POWER indicator does not light GREEN when power switch is turned to ON (1) position.	1. Check power connections from A.C. Outlet to power supply to printer.
POWER indicator lights GREEN, but printer will not print.	1. Check interface cable connections from computer to printer.
Printer appears to be working, but nothing is printed.	1. Verify that the labels are the correct type (direct thermal or thermal transfer). 2. For LP models, check that the roll is loaded with the direct thermal side facing up. 3. For TLP models, check that the ribbon is properly installed. 4. Clean the print head with cleaning pen.
Printing is faded or poor quality.	1. Clean the print head with cleaning pen. 2. Adjust print speed/darkness in software.
Prints only partial label or skips a label.	1. Perform AutoSense gap sensor adjustment. 2. Label caught on print head. 3. Print head is not properly latched. 4. Possible software problem. Check the printer memory configuration. Refer to the EPL Programming manual.
Printing stops and POWER indicator lights ORANGE.	1. Perform AutoSense gap sensor adjustment. 2. Possible problem with label stock. Use only Eltron approved labels and tags. 3. Possible label jam. 4. Insufficient memory for label size. Check the printer memory configuration. 5. Possible software problem. Refer to the EPL Programming manual.

Other Support Resources

The first troubleshooting reference source is the table on the previous page. Next, contact the dealer where you purchased your printer.

Eltron International also provides a variety of information and user support services:

- ***Internet***:
  Web Address: http://www.eltron.com
  ftp: //ftp.eltron.com
  e-mail:
  Label Printers: techsup@eltron.com
  Card Printers: privsup@eltron.com
  Europe: eurosup@eltron.com
  Singapore: asiasup@eltron.com
  Latin America: latinsup@eltron.com
- ***BBS***: +1 (805) 579 3445
  The BBS supports data rates up to 28.8 BPS with No Parity, 8 data bits, and 1 stop bit (n,8,1). Communications software should have an ANSI Terminal Mode (not MS Windows Terminal) such as Q-Modem.
- ***CompuServe e-mail***: 102251,1164
- ***Customer Service***: +1 (800) 344 4003
  For the name of a dealer in your area.
- ***Technical Support FAX:***
  USA: +1 (805) 579 1808
  Asia: +65 73 38 206
  Northern Europe: +44 (0) 118 975 2005
  Southern Europe: +33 (0) 240 097 070
  Latin America: +1 (847) 584 2725
  For your assistance and support with Eltron printers and software.

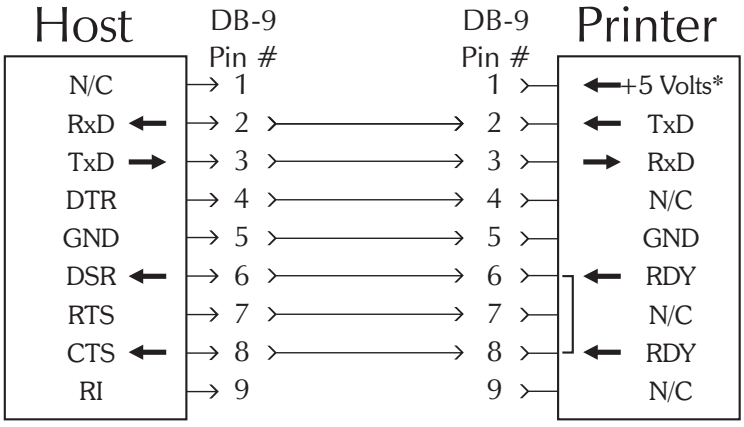
Appendix B
Accessories

Accessories available for the LP2642, TLP2642, LP3642 and TLP3642 printers are listed below. Always refer to the ELTRON part number when placing an order. For the name of an Eltron dealer in your area, call: **1(800) 344-4003.**

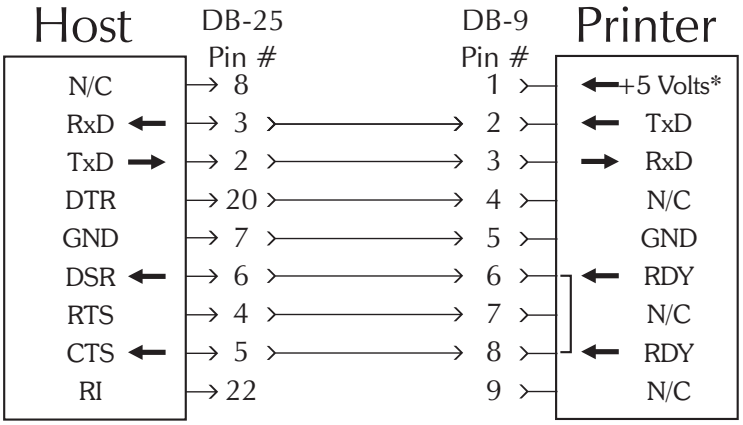
Description	Part Number	LP2642	LP3642	TLP2642	TLP3642
Parallel Interface Cable, 6'	300016-006	✔	✔	✔	✔
Parallel Interface Cable, 10'	300016-010	✔	✔	✔	✔
Serial Interface Cable, 6' (DB-9 to DB-9)	300017-006	✔	✔	✔	✔
Serial Interface Cable, 10' (DB-9 to DB-9)	300017-010	✔	✔	✔	✔
Serial Interface Cable, 6' (DB-25 to DB-9)	300018-006	✔	✔	✔	✔
128K Memory Cartridge with Real Time Clock	103217-005	✔	✔	✔	✔
256K Memory Cartridge with Real Time Clock	103217-006	✔	✔	✔	✔
384K Memory Cartridge with Real Time Clock	103217-007	✔	✔	✔	✔
Black Line Sensor	105101-001	✔	✔	✔	✔
128K Additional Memory	100278-001	✔	✔	✔	✔
Real Time Clock Option	802033-001	✔	✔	✔	✔
Battery, 3V Lithium	808042-001	✔	✔	✔	✔
Power Rewinder, 120V	103284-001	✔	✔	✔	✔
Power Rewinder, 220V	103284-002	✔	✔	✔	✔
Create-A-Label 3 Software for DOS	105506-001	✔	✔	✔	✔
Create-A-Label 3 Software for Windows	105524-001	✔	✔	✔	✔
Battery Pack Kit	120187-001	✔	✔	✔	✔
Keyboard Display Unit	120180-001	✔	✔	✔	✔
TAB1 IBM Twinax Protocol Adapter Box	100070-001	✔	✔	✔	✔
User's Manual	980101-001	✔	✔	✔	✔
Programmers Manual	980009-001	✔	✔	✔	✔

Serial Interface Cable Wiring

The figure below displays the cable wiring required to use the printer's serial interface.



Female DB-9 to Male DB-9
Cable P/N 300017-006 (6') or 300017-010 (10')



Female DB-25 to Male DB-9
Cable P/N 300018-006 (6')

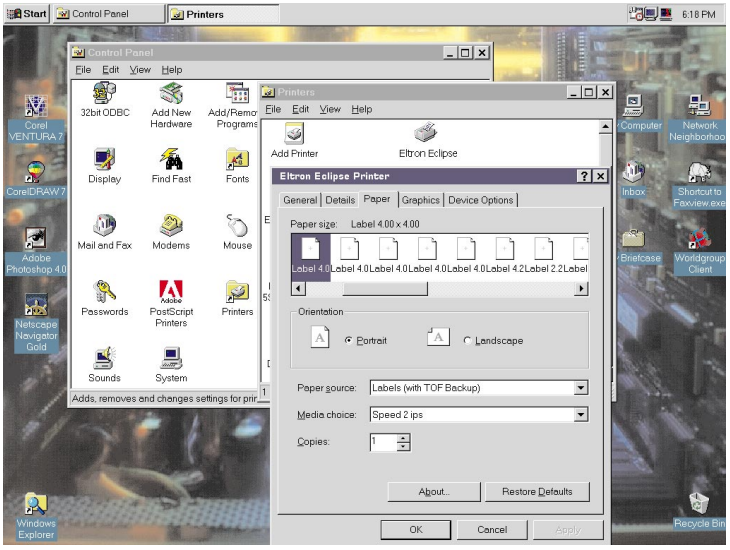
*+5 volts at 150 mA for external device (e.g. KDU or scanner)

Appendix C Using The Windows Printer Driver

The Windows printer driver provides control of several printer features when printing from Windows software applications. These features are accessed through the "Settings / Printers" window on the Windows 95 Start menu.

Paper (Label) Size

Before creating a label, the paper size for the currently loaded labels must be selected in the control panel.



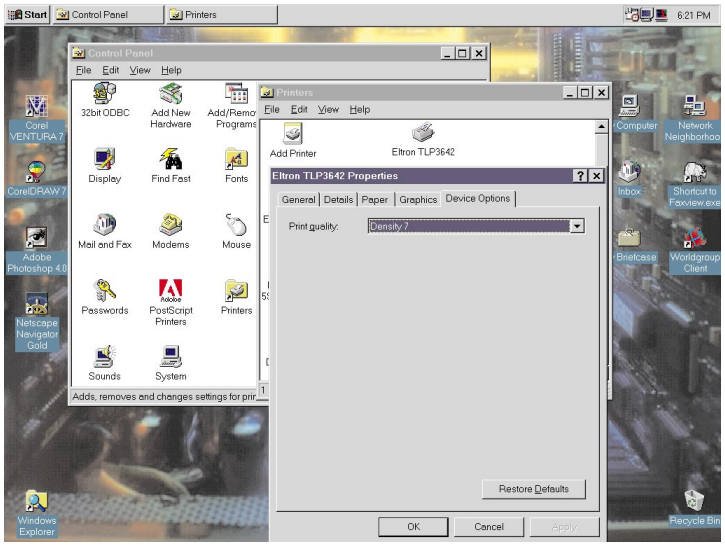
Setting the proper label size allows the driver to provide accurate printing limits and margin information to Windows applications.

Media Choice Print Speed

The print speed can be adjusted to compensate for manufacturing differences in label stock. Selecting a slower print speed can improve the appearance of lines and text on some label stocks. When printing large labels or labels with a lot of information near the right edge, a slower print speed will avoid pauses while printing caused by buffer under-run. To access this menu, select the Paper tab from the printer properties menu.

Print Quality, Print Density

The print darkness or density can be changed by using the Print Quality option. If print looks faded when printing at high speed, select a higher darkness number for the Print Quality setting. If horizontal lines seem to run together, select a lower darkness number.



To access this menu, select the Device Options tab from the printer properties menu.

Print density is also affected by print speed. Changing both Print Speed and Density may be required to achieve the desired results.

World Wide Offices:

Eltron International, Corporate Headquarters
41 Moreland Road
Simi Valley, CA 93065-1692 USA
Phone: +1 (805) 579 1800
FAX: +1 (805) 579 1808
e-mail: slaes@eltron.com

Eltron International, Northern Europe
Unit 2, Rose Kiln Lane
Reading, Berkshire, RG2 OHP England
Phone: +44 (0) 118 975 2024
FAX: +44 (0) 118 975 2005
e-mail: eurosales@eltron.com

Eltron International, Southern Europe
Zone Indutrielle, Rue d'Amsterdam
44370 Varades, France
Phone: +33 (0) 240 097 070
FAX: +33 (0) 240 834 745
e-mail:privsales@eltron.com

Eltron International, Latin America
836 Arlington Heights Rd. #357
Elk Grove, IL 60007
Phone: +1 (847) 584 2714
FAX: +1 (847) 584 2725
e-mail: latinsales@eltron.com

Eltron International, Singapore
#07-01 Trademart Singapore
60 Martin Road
Singapore 239067
Phone: +65 73 33 123
FAX: +65 73 38 206
e-mail: asiasales@eltron.com

Eltron